Figure 1

Alford et al.
AUS920000865US1
Graphical User Interface
for Visualization of
Sampled Data Compared
to Entitled or Reference
Levels
Page 1 of 12
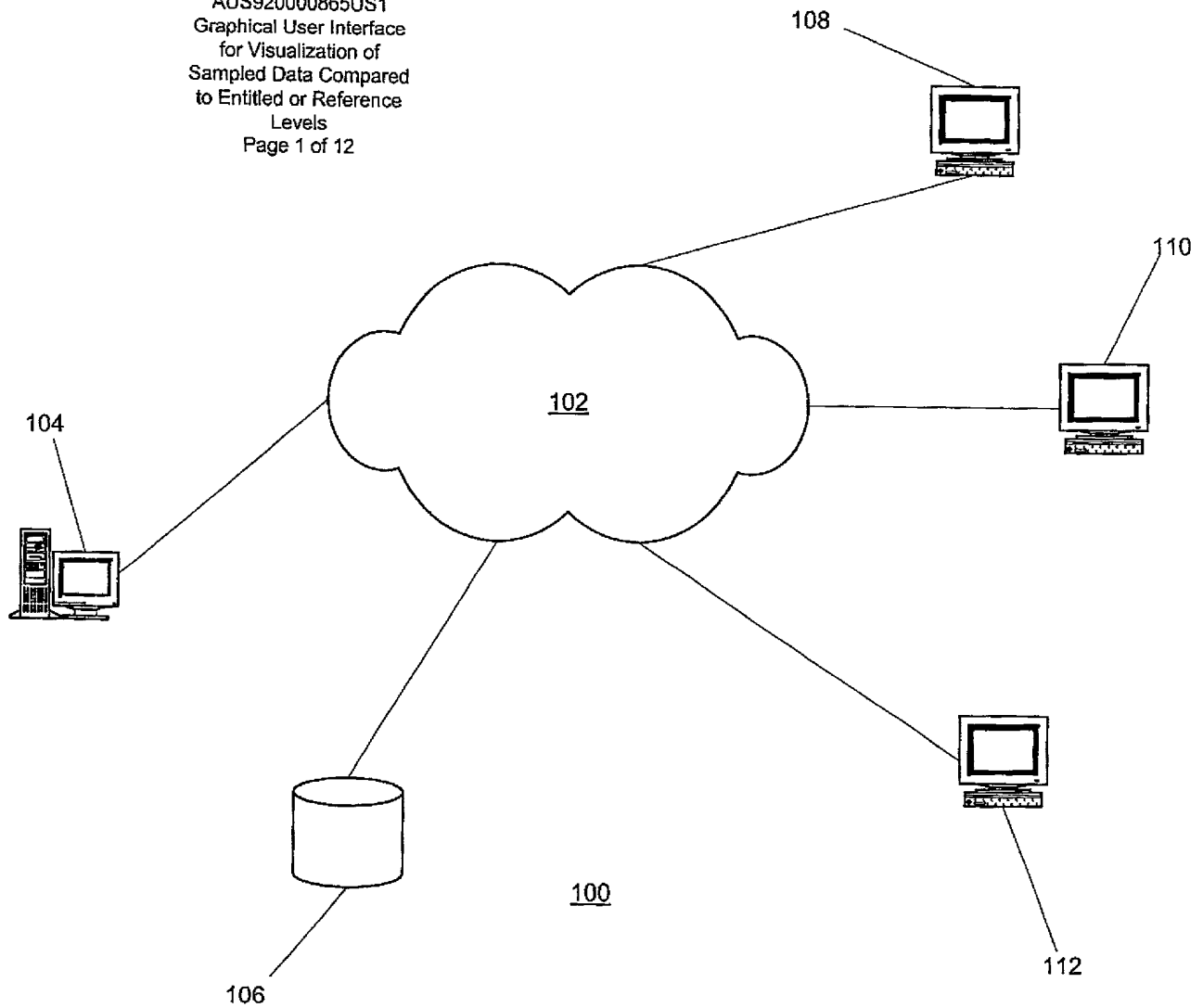

108

110

104

102

100

106

112

Figure 2

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Graphical User Interface
for Visualization of
Sampled Data Compared
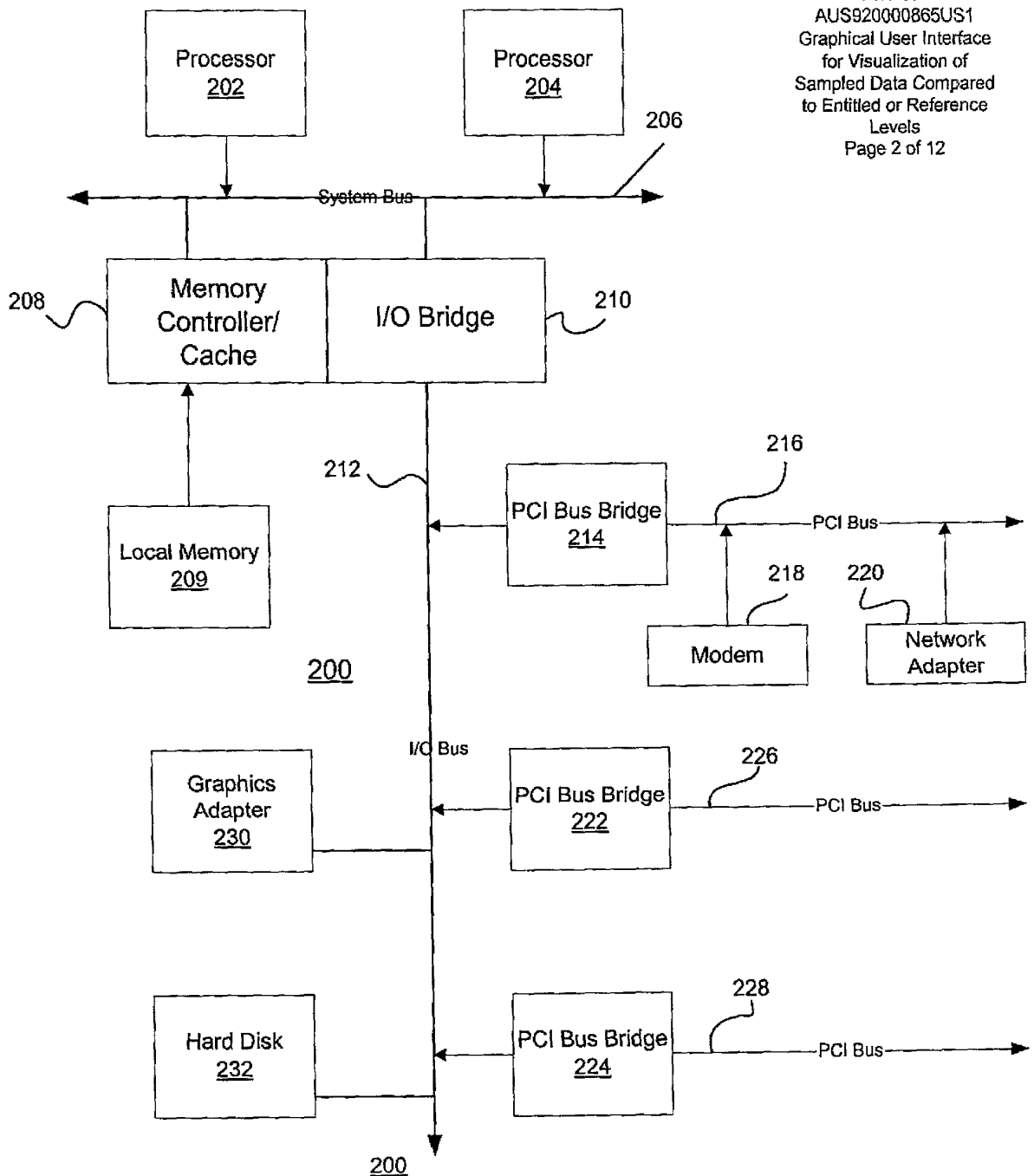to Entitled or Reference
Levels
Page 2 of 12

Client

Figure 3

300

Processor 302

Host/PCI Cache/Bridge 308

Main Memory 304

Bus 306

Audio Adapter 316

Audio/Video Adapter 319

Graphics Adapter 318

Expansion Bus Interface 314

LAN Adapter 310

SCSI Host Bus Adapter 312

Memory 324

Modem 322

Keyboard and Mouse Adapter 320

Disk 326

Tape 328

CD-ROM 330

DVD-ROM 332

410   430   450

Processor   Share/Tier Profile   Process Classifier
                   Storage Device

470

Input/Output   Classification Rules   Workload Queue
Interface   Storage Device

420   440   460

Figure 4

class name	user name	group name	application
system	root	----	----
support	tech 1, tech 2	----	----
marketing	----	----	/bin/analysis
skilled	----	webmasters	/bin/emacs
promoted	sally	staff	/bin/ksh, /bin/sh
games	!bob, !ted	!managers	/bin/solitaire
bad	hacker	----	----

Figure 5

610

Process 1

Process 2

620

Process 3

630

Process 4

640

Process 5

650

660

Classification
Rules

Class 1

Tier Value

Number of Shares

670
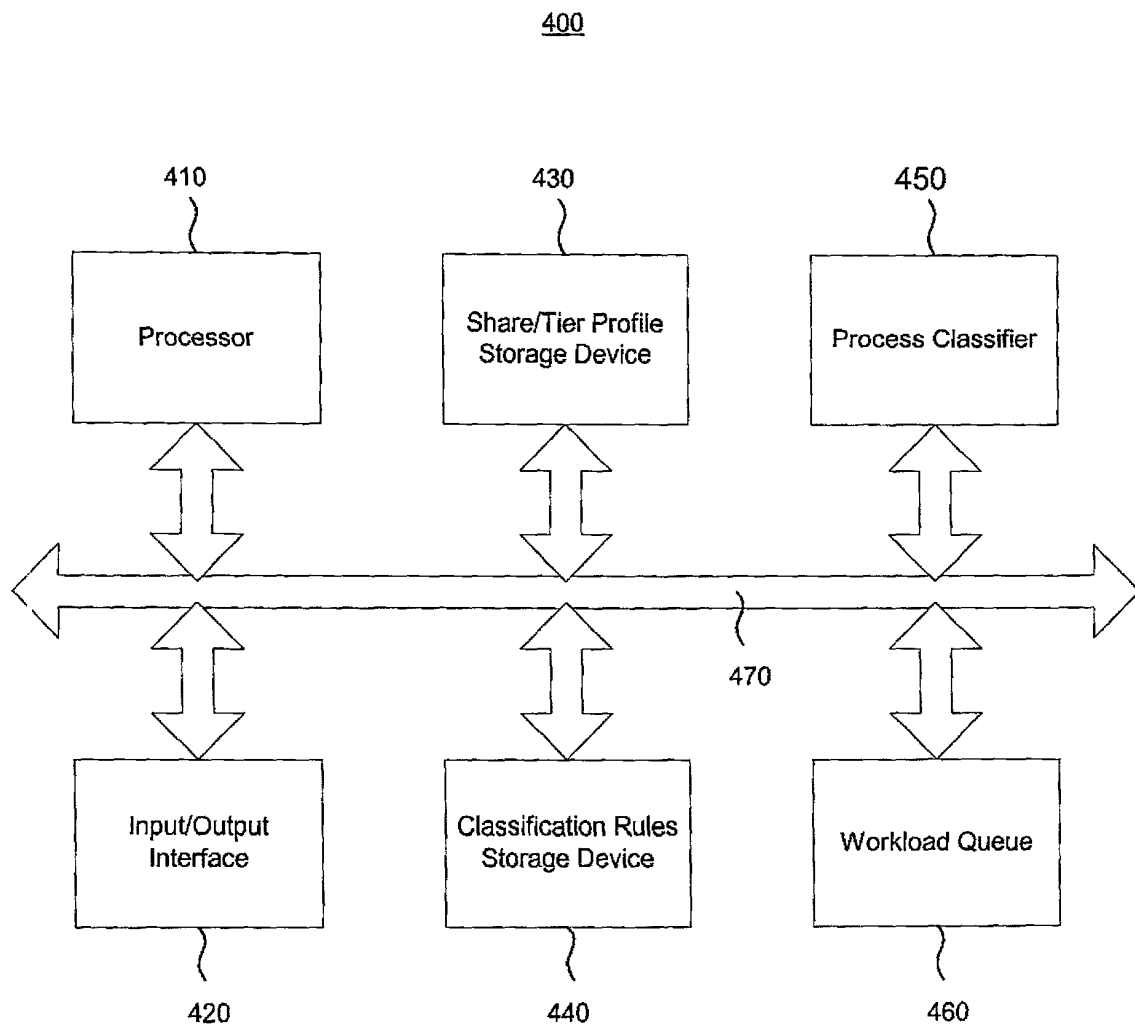
680

Class 2

Tier Value
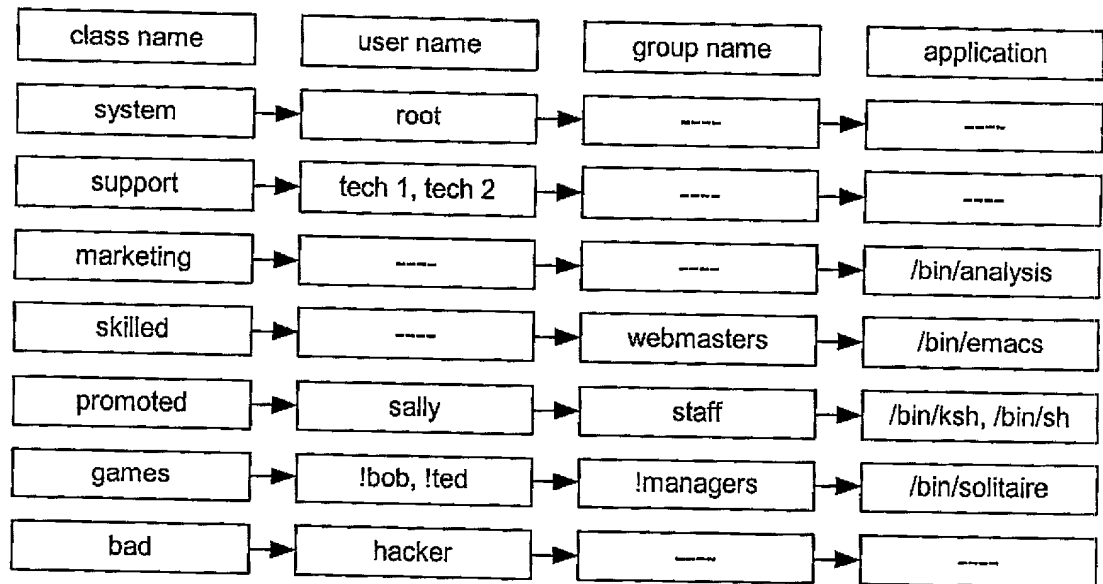
Number of Shares

Figure 6

Figure 7

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Graphical User Interface for Visualization of Sampled Data
Compared to Entitled or Reference Levels
Page 7 of 12

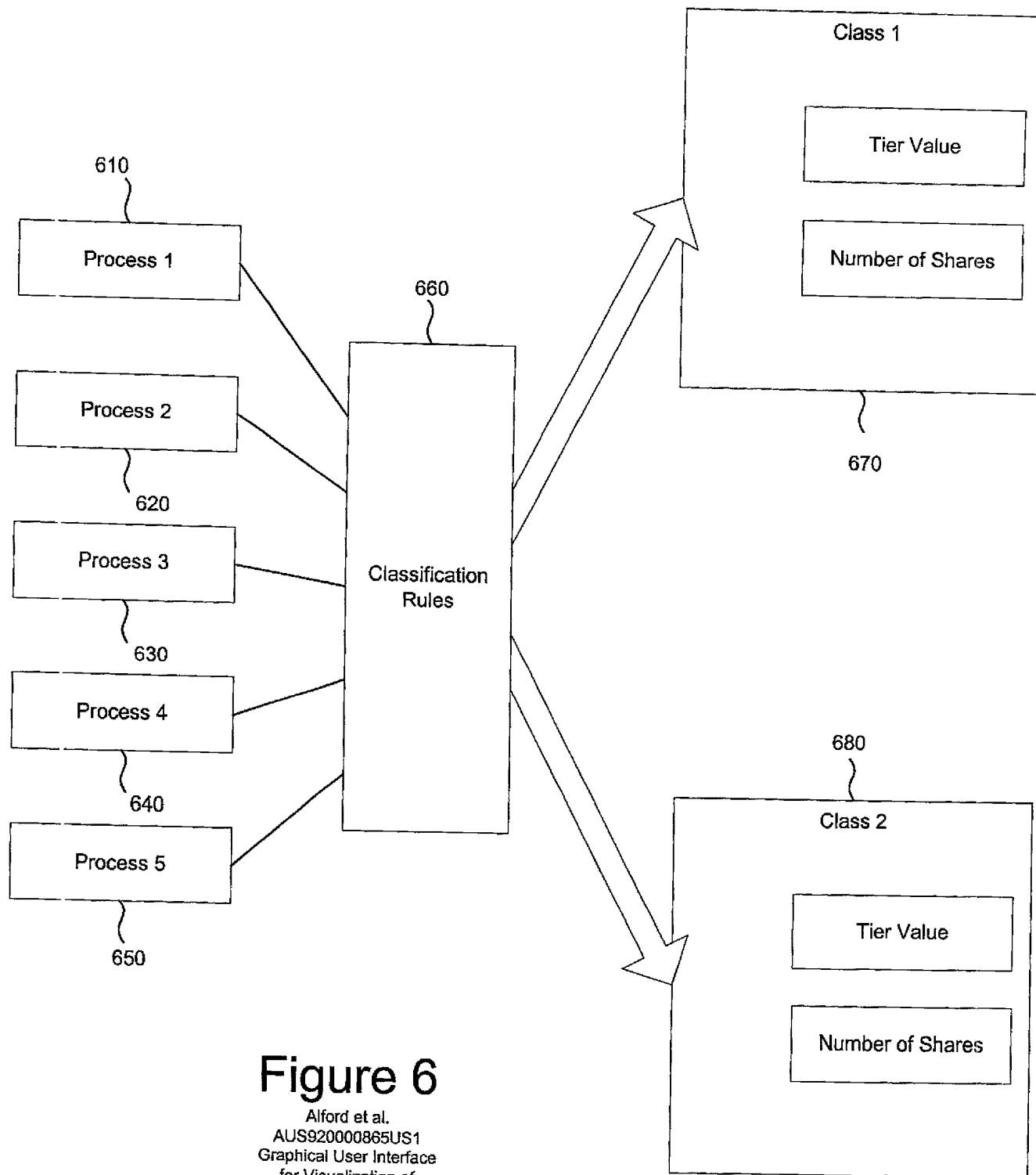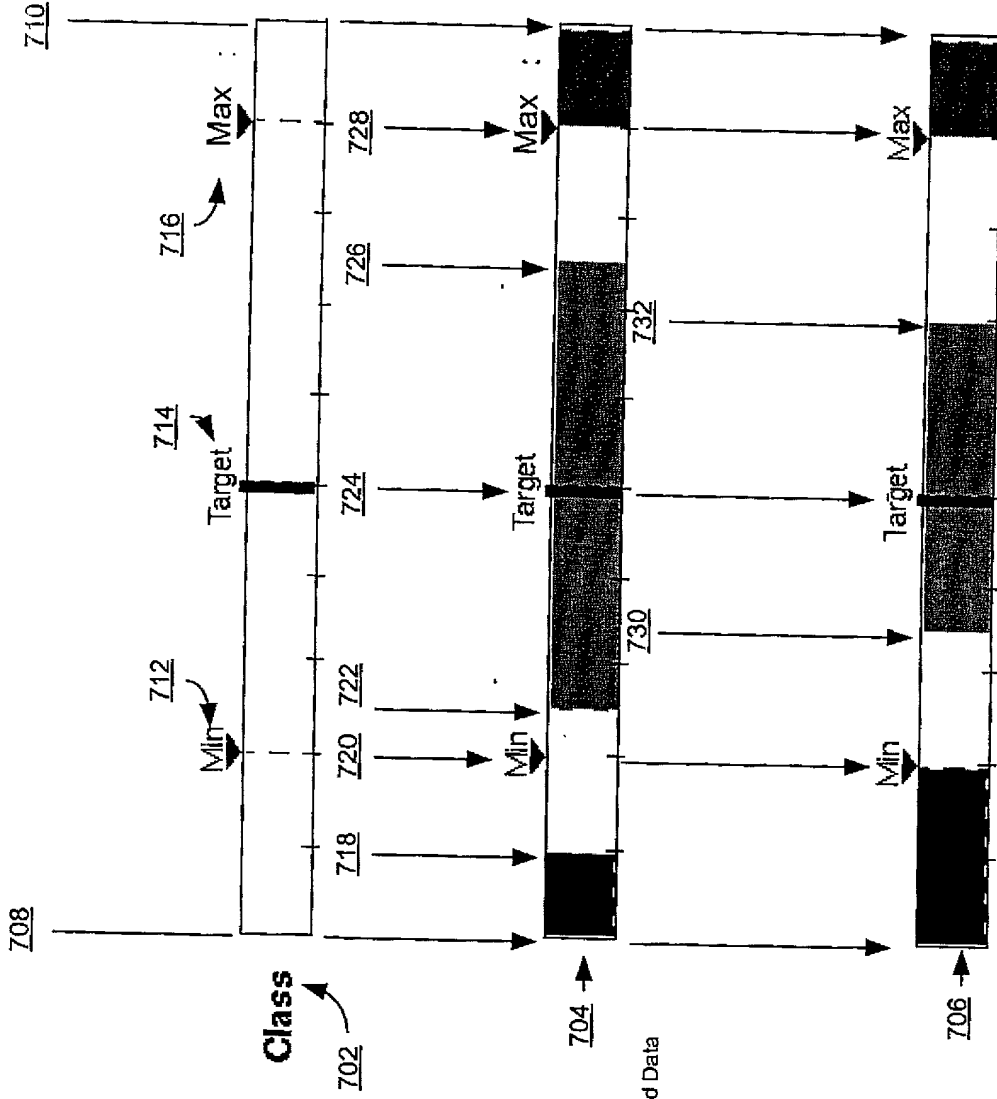Figure 8

TO826300 0823300

Figure 9

Figure 10

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Compared to Entitled or Reference Levels
Page 10 of 12

910

WLM Console   Selected

Snapshot | Bar View | Table View

Host sunra.austin.ibm.com   WLM State Active

Period1 9:00-17:00 1/8/2001-1/8/2001   Period2 9:00-17:00 1/9/2001-1/9/2001

906   908   1018   1020

Tier	Class	- CPU +				- MEM +				- Disk I/O +			
1	DB1												
2	Users												
1	DB2												
1	Websphere												
0	System												
3	Batch1												
4	Batch2												
0	Shared												

1002 1004 1006 1008 1009 1010 1012 1014 1016

RunQ 3->4 | SwapQ 2->2 | CPU busy% 62->86 | I/O wait% 9->12 | PagSp used% 55->67

1000

Figure 1

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Graphical User Interface
Visualization of Sampled [
Compared to Entitled [
Reference Levels
Page 11 of 12

Figure 12

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Graphical User Interface for
Visualization of Sampled Data
Compared to Entitled or
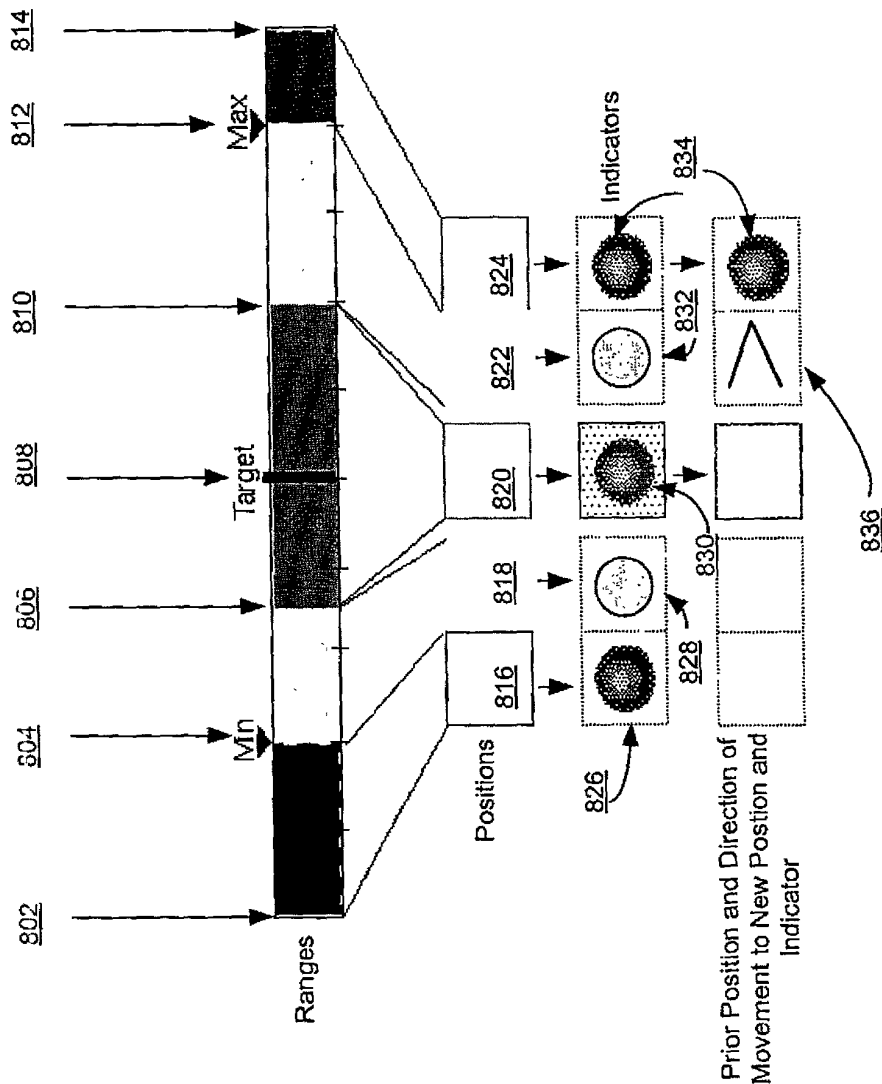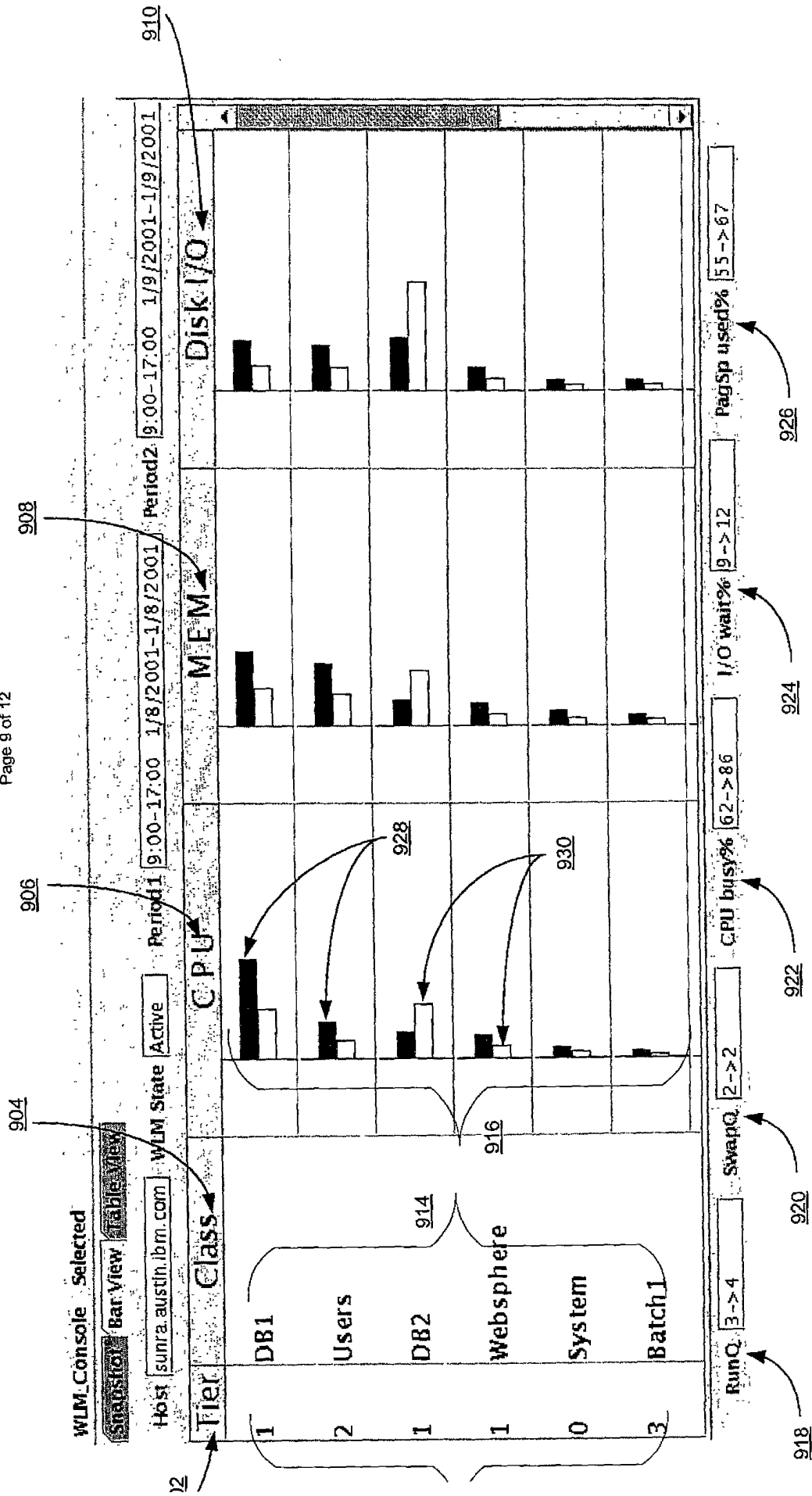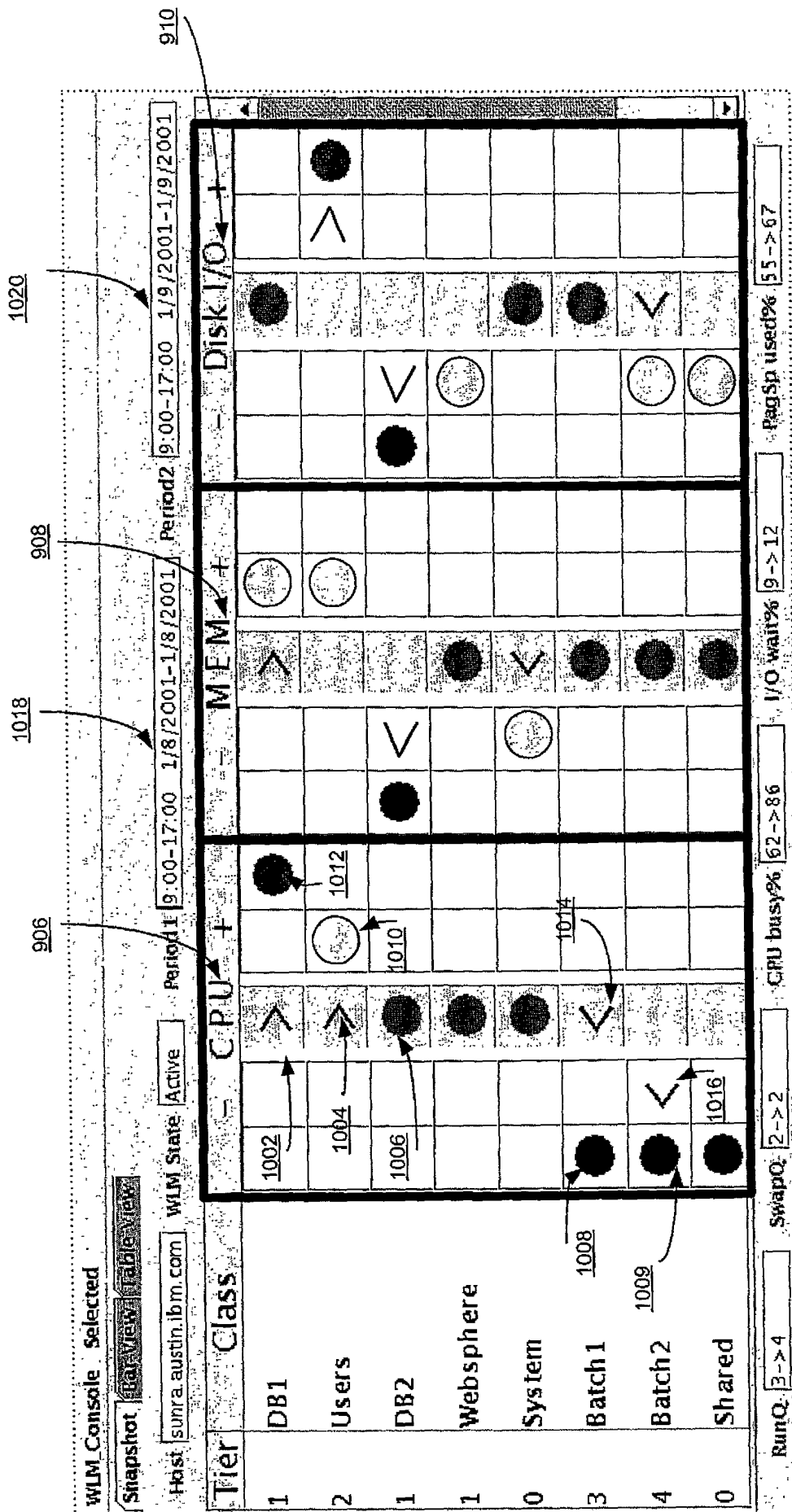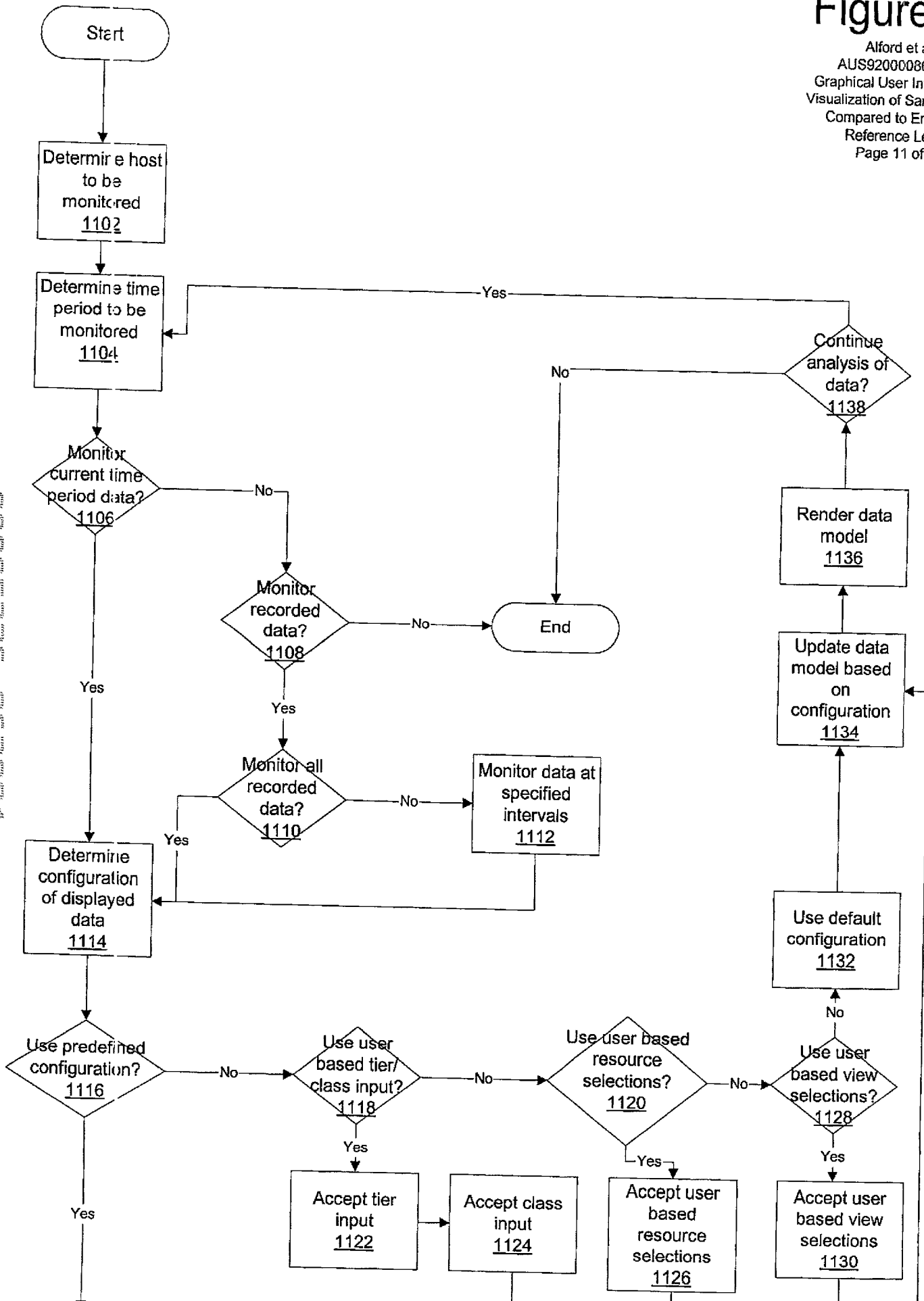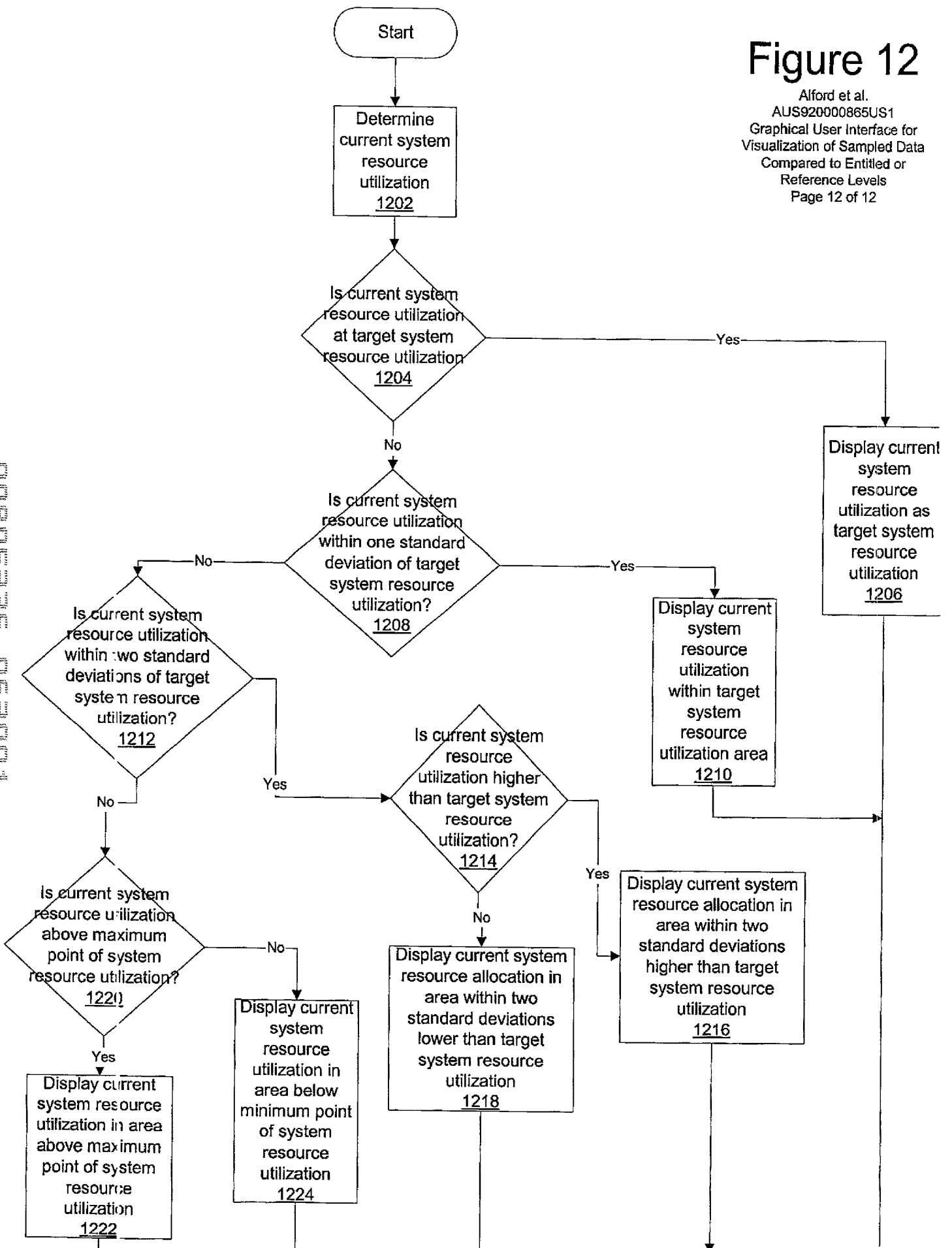Reference Levels
Page 12 of 12

Start

Determine current system resource utilization
1202

Is current system resource utilization at target system resource utilization
1204

—Yes—

Display current system resource utilization as target system resource utilization
1206

No

Is current system resource utilization within one standard deviation of target system resource utilization?
1208

—Yes—

Display current system resource utilization within target system resource utilization area
1210

—No—

Is current system resource utilization within two standard deviations of target system resource utilization?
1212

Yes

Is current system resource utilization higher than target system resource utilization?
1214

No

No

Display current system resource allocation in area within two standard deviations higher than target system resource utilization
1216

Yes

Is current system resource utilization above maximum point of system resource utilization?
1220

—No—

Display current system resource utilization in area below minimum point of system resource utilization
1224

Display current system resource allocation in area within two standard deviations lower than target system resource utilization
1218

Yes

Display current system resource utilization in area above maximum point of system resource utilization
1222